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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/996,834	11/29/2001	Ivan Bachelder	C01-015	2575
23459	7590	01/09/2004	EXAMINER	
ARTHUR J. O'DEA LEGAL DEPARTMENT COGNEX CORPORATION ONE VISION DRIVE NATICK, MA 01760-2077			FULLER, RODNEY EVAN	
			ART UNIT	PAPER NUMBER
			2851	
DATE MAILED: 01/09/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/996,834

Applicant(s)

BACHELDER ET AL.

Examiner

Rodney E Fuller

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Remarks***

1. In response to applicant's Amendment, dated October 27, 2003, the examiner acknowledges the corrections of the objections to the Specification, Drawings and Claims 9-12 set forth in the Office Action mailed July 23, 2003.
2. Regarding claims 1, 3-8, 10-13, 19, 20, 26-28 and 30-32 as being anticipated by Hoshiyama (US 5,812,265), the applicant makes the argument that Hoshiyama lacks "the characteristic of amended claim 1, i.e., a single characteristic that is known and measured in the image" and that Hoshiyama "also does not place the item being measured in the same image as the known item." The examiner maintains that Hoshiyama does disclose the claimed invention. The examiner notes that Hoshiyama states (abstract) that "an image sensor unit detects a predetermined portion of the article and the marks of the scale corresponding to the predetermined portion of the article selectively and successively, and the image sensor unit generates output signals in accordance with the detected results of the article and the scale." (Emphasis added) Hence, the examiner has considered the applicant's arguments and maintains the rejection.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3-8, 10-13, 19, 20, 26-28 and 30-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Hoshiyama (US 5,812,265).

Regarding claim 1, 8, 13, 20, 27, 30 and 31, Hoshiyama discloses “(a) selecting a characteristic having a known value (abstract, line 4), the characteristic associated with an object (b) acquiring, using the imaging system (Fig. 1, ref.# 3, 7a, 7b, 7c), an image of at least a portion of the characteristic of the object (c) finding and measuring the characteristic in the image to provide the measured value (abstract, lines 7-9); (d) calculating a scale relationship between the object and the image, using the measured value and the known value (abstract, lines 9-10); and (e) processing the image using the scale relationship (abstract, line 9).”

Regarding claims 3 and 10, Hoshiyama discloses “wherein selecting the characteristic further includes: selecting, as the characteristic, an aspect of a feature of the object, and wherein finding and measuring further includes: finding the feature in the image and measuring the aspect of the feature to provide the measured value.” (column 2, lines 17-20)

Regarding claims 4, 10 and 28, Hoshiyama discloses “wherein finding and measuring further includes: generating at least one model of at least part of to object, the model including the characteristic; searching the image to find a best match to the at least one model; and measuring the characteristic of the best match to provide the measured value.” (column 2, lines 26-29)

Regarding claims 5 and 11, Hoshiyama discloses “wherein finding and measuring further includes: finding the characteristic in the image and measuring an aspect of the characteristic in the image to provide the measured value.” (column 2, lines 17-25)

Regarding claims 6, 7, 12, 19, 26, 27 and 32, Hoshiyama discloses "wherein processing further includes: processing more than one image using the scale relationship." (Fig. 1b, ref.# 41)

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2, 9, 14-18, 21-25 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoshiyama in view of Dar, et al. (US 5,995,212).

Regarding claims 2, 9, 14-18, 21-25 and 29, Hoshiyama discloses all the structure set forth in the claims (see above) except "wherein the object is a fiber-optic end-face, and wherein selecting the characteristic further includes: selecting, as the characteristic, a diameter of a substantially annular cladding of the fiber-optic end-face." Measuring characteristics such as the diameter of an annular cladding of an optical fiber end-face is routine in the art as is evident from the teaching of Dar (US 5,995,212) (see abstract). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hoshiyama "wherein the object is a fiber-optic end-face, and wherein selecting the characteristic further includes: selecting, as the characteristic, a diameter of a substantially annular cladding of the fiber-optic end-face." The ordinary artisan would have been motivated to modify Hoshiyama in

the manner described above for at least the purpose of providing an inspection system and method for optical fibers which has good repeatability and fully removes operator subjectivity as noted by Dar (US 5,995,212) in column 2, lines 28-30.

***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney E Fuller whose telephone number is 703-306-5641. The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams can be reached on 703-308-1436. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Rodney E Fuller  
Primary Examiner  
Art Unit 2851



January 7, 2004